DECLARATION FOR THE EXPLANATION OF SIGNIFICANT DIFFERENCES

SITE NAME AND LOCATION

Fletcher's Paint Works and Storage Facility Superfund Site
Milford, New Hampshire

STATEMENT OF PURPOSE

This decision document sets forth the basis for the determination to issue the attached Explanation of Significant Differences (ESD) for the Fletcher's Paint Works and Storage Facility Superfund Site in Milford, New Hampshire.

STATUTORY BASIS FOR ISSUANCE OF THE ESD

Under Section 117(c) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9617(c), if the U.S. Environmental Protection Agency (EPA) determines that the remedial action being undertaken at a Site differs significantly from the Record of Decision (ROD) for that Site, the EPA shall publish an explanation of the significant differences between the remedial action being undertaken and the remedial action set forth in the ROD and the reasons such changes are being made. Section 300.435(c) of the National Contingency Plan (NCP), 40 C.F.R. § 300.435(c), and EPA guidance (Office of Solid Waste and Emergency Response [OSWER] Directive 9355.3-02), indicate that an ESD, rather than a Record of Decision (ROD) amendment, is appropriate where the changes being made to the remedy are significant but do not fundamentally alter the overall remedy with respect to scope, performance, or cost. Because the adjustments to the ROD provided in the ESD are significant but do not fundamentally alter the overall remedy for the Site with respect to scope, performance, or cost, this ESD is properly being issued.

In accordance with Section 300.435(c) of the NCP, this ESD and supporting documentation will become part of the Administrative Record which is available for public review at both the EPA Region I Record Center in Boston, Massachusetts and the Wadleigh Memorial Library in Milford, New Hampshire.

OVERVIEW OF THE ESD

Summary of the Selected Remedy

The September 30, 1998, Record of Decision (ROD) for this Site sets forth the selected remedy for Operable Unit One at the Fletcher's Paint Site. The remedy involves the excavation and on-site treatment of principal threat wastes which consist primarily of PCB contaminated soils, the use of the treated soils as backfill at the Site, and placement of a soil and asphalt cover over the residual low-level threat wastes. The selected remedy also includes monitored natural attenuation of the contaminated groundwater in the overburden and bedrock aquifers and institutional

controls to prevent future ingestion of contaminated groundwater, as well as restrictions on the use and access to the subsurface soils at the Elm Street Site.

Specifically, Operable Unit One includes the areas referred to as the Elm Street Site, the Mill Street Site, the drainage ditch and the plume of groundwater contamination that exists from the Mill Street Site to the Souhegan River. The remedial measures, to be implemented as part of the ROD, will prevent the future leaching of PCBs from the low-level residual waste into groundwater in excess of drinking water standards and will allow for restoration of the Site to beneficial uses.

Description of Significant Differences

Soil cleanup levels that are protective of human health were established in the ROD for compounds of concern in the surface and subsurface soils exhibiting an unacceptable cancer risk and/or hazard index. Soil cleanup levels for known and suspect carcinogenic chemicals of concern (Classes A, B, and C compounds) were set at a 10-6 excess cancer risk level considering exposures through dermal contact and incidental ingestion. Cleanup levels for chemicals of concern in soils having non-carcinogenic effects (Classes D and E compounds) were derived for the same exposure pathway(s) and correspond to an acceptable exposure level to which the human population (including sensitive subgroups) may be exposed without adverse effect during a lifetime or part of a lifetime, incorporating an adequate margin of safety (hazard quotient = 1).

This ESD sets forth a change in the cleanup level language established in the ROD to include the following language:

> "If a cleanup value described in the ROD, is not capable of being detected with good precision and accuracy or is below background values, then either the practical quantitation limit or a background value will be used, as appropriate, for the soil cleanup level."

This change in language is necessary to reflect the potential for background concentrations of arsenic at the Site to be higher than the ROD established cleanup level of 0.9 mg/kg and the practical quantitation limit for benzo(a)pyrene to be higher than the ROD established cleanup level of 0.2 mg/kg.

SUPPORT AGENCY COMMENTS

The State of New Hampshire has participated with the EPA in reviewing the modifications to the cleanup level language for the remedy which are described herein and concurs with this ESD. The State of New Hampshire's concurrence will be included in the administrative record supporting this ESD.

DECLARATION

For the foregoing reasons, by my signature below, I approve the issuance of an Explanation of Significant Differences for the Fletcher's Paint Works and Storage Facility Superfund Site in Milford, New Hampshire, and the changes stated therein.

3/14/01
Date

Patricia L. Meaney, Director
Office of Site Remediation and Restoration
U.S. Environmental Protection Agency
Region I, New England

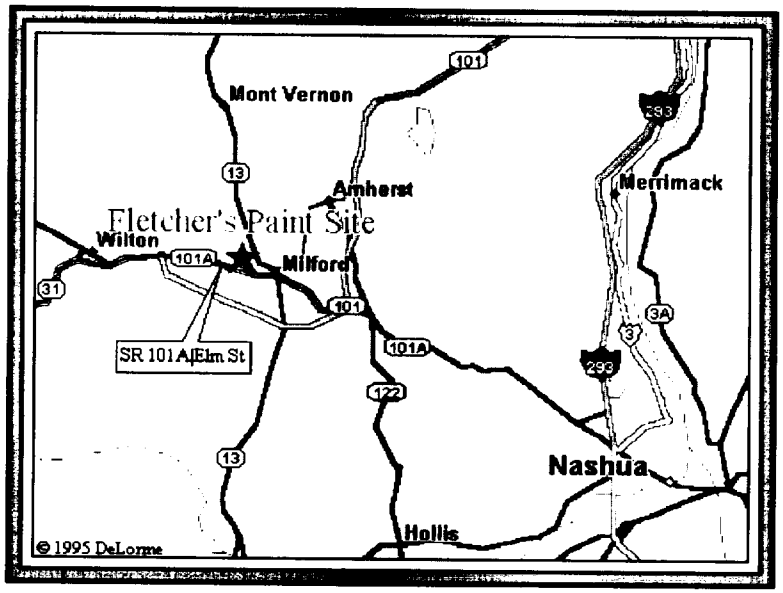
EXPLANATION OF SIGNIFICANT DIFFERENCES
FLETCHER'S PAINT WORKS AND STORAGE FACILITY SUPERFUND SITE
MILFORD, NEW HAMPSHIRE

I. INTRODUCTION

A. Site Name and Location

Site Name: Fletcher's Paint Works and Storage Facility Superfund Site

Site Location: Milford, New Hampshire in Hillsborough County



B. Lead and Support Agencies

Lead Agency: United States Environmental Protection Agency

Support Agency: New Hampshire Department of Environmental Services

C. Legal Authority

Under Section 117(c) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9617(c), Section 300.435(c) of the National Contingency Plan (NCP), 40 C.F.R. § 300.435(c), and U.S. Environmental Protection Agency (EPA) guidance (Office of Solid Waste and Emergency Response [OSWER] Directive 9355.3-02), if the EPA determines that differences in the remedial action significantly change but do not fundamentally alter the remedy selected in the Record of Decision (ROD) with respect to scope, performance, or cost, the EPA shall publish an explanation of the significant differences between the remedial action being undertaken and the remedial action set forth in the ROD and the reasons such changes are being made.

Original in Color

D. Summary of Circumstances Necessitating this Explanation of Significant Differences

This ESD addresses the cleanup levels set forth in the ROD and is necessary to reflect the potential for background concentrations of arsenic at the Site to be higher than the ROD established cleanup level of 0.9 mg/kg and the practical quantitation limit for benzo(a)pyrene to be higher than the ROD established cleanup level of 0.2 mg/kg.

E. Availability of Documents

This Explanation of Significant Differences (ESD) and supporting documentation shall become part of the Administrative Record for the Site. The ESD, supporting documentation for the ESD, and the Administrative Record are available to the public at the following locations and may be reviewed at the times listed:

U.S. Environmental Protection Agency
Records Center
1 Congress Street
Boston, MA 02114-2023
(617) 918-1440
Weekdays from 10:00 a.m. to 1:00 p.m.,
and from 2:00 p.m. to 5:00 p.m.

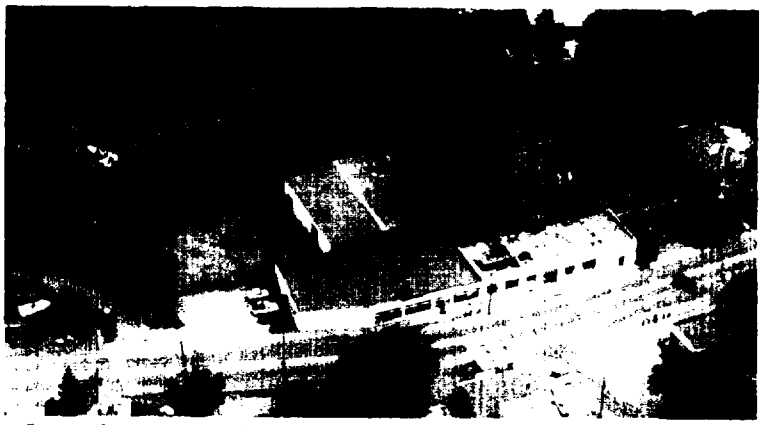
Wadleigh Memorial Library
49 Nashua Street
Milford, NH 03055
(603) 673-2408
Mon-Thurs:9:30 am to 8:30 pm; Thurs- Sat. 9:30 am to 5:00 pm; Sun. 1:00-5:00 pm

II. SUMMARY OF SITE HISTORY, CONTAMINATION AND SELECTED REMEDY

A. Site History

Fletcher's Paint was in operation from approximately 1948 until 1991 as a manufacturer and retail distributor of paints and stains for mostly residential uses. The paints were primarily water-based latex paints and organic-based solvent paints. The company's annual production was typically 25,000 to 35,000 gallons. Following the closure of the Fletcher's Paint Works in 1991, a consignment shop operated in the building until a court ordered eviction in the summer of 2000. The Mill Street site sits vacant following the 1993 shed demolition removal action.

Land use at the Elm Street site prior to 1949 included agricultural farming in the 1800's (as part of the Crosby Farm), hide storage for the nearby tannery, a turn of the century blacksmith and carriage painting business, an armory (1913 to 1926), the town burning dump (1929 to 1947), and an automotive dealership (1920 to 1949).



Fletcher's Elm Street Site

The Mill Street site contained two attached sheds that were used by Fletcher Paint as warehouses for bulk paint pigments for more than twenty-five years. Previously, they had been used for grain storage. Another building on the property was reportedly destroyed by fire, prior to Fletcher's involvement at the site.

Fletcher's Mill Street Site

Original in Color

On February 1, 1983, the New Hampshire Office of Waste Management (NHOWM) conducted an inspection of the Fletcher Paint Works. The facility was classified as a waste generator and was noted to be out of compliance with the New Hampshire Department of Public Health regulations. The facility never returned the notification forms requested. However, no further action was taken and, upon a follow-up inspection on July 7, 1985, NHOWM determined that the Paint Works facility was no longer considered a generator of hazardous waste.

The 1984 detection of volatile organic compounds (VOCs) in the nearby Keyes municipal water supply well by the New Hampshire Department of Environmental Services ("NHDES"), formerly known as the New Hampshire Water Supply and Pollution Control Commission, triggered the removal of the Keyes Well from service and prompted a series of investigative activities to determine the contaminant source. During a Preliminary Assessment conducted in 1985, the EPA inspected the facility and found in the Fletcher's Paint Works parking lot approximately fifty drums stacked on their sides several drums high. On the southeastern edge of the parking lot, approximately 150 drums containing alkyl resins were adjacent to the building. The majority of these drums were bulging, rusty, and dented, and the ground beneath the drums was stained. A third area of drum storage located near the southeast edge of the building contained approximately fifty drums of inorganic pigmenting agents used in the manufacture of paint. In addition, twenty to thirty drums were found stacked outside the storage building on Mill Street. Most of those drums were open, empty, and stored on their side without benefit of a liner or other containment system.

From May 1988 to October 1988, the EPA conducted removal activities at both the Elm Street and Mill Street locations. At Elm Street, the main activities performed by the EPA were the staging, sampling, analysis and disposal of 863 drums of hazardous substances and the covering of the PCB contaminated soils of the parking lot with geotextile fabric and fill. At Mill Street, the EPA covered contaminated soils, inventoried bags of pigment in the storage shed, and disposed of 12 bags of asbestos contained in the shed. The Fletcher Paint Works and Storage Facility Superfund Site was proposed for inclusion on the National Priorities List on June 24, 1988, and finalized on March 30, 1989. In November and December of 1991, the EPA conducted a second removal, installing a fence at the Elm Street portion of the Site and removing laboratory containers found in the building on that portion of the Site.

A third Removal Action was completed by the EPA at the Mill Street and Elm Street sites during the summer of 1993. The Removal Action included characterization and disposal of wastes found in the Elm Street and Mill Street buildings, demolition and disposal of the Mill Street building, and repair of the temporary covers on both the Mill Street and Elm Street properties.

Approximately 500 bags of dry paint pigments, 100 cardboard drums of dry resins, and numerous various-sized containers of unknown materials were found in the Mill Street building. Approximately 327 drums of hazardous substances, 750 bags of paint pigments 10 bags of friable asbestos and 2,500 small containers of miscellaneous substances were removed from the Elm Street building. A total of 512 drums and 99 wrangler boxes were disposed of during this action. The materials were categorized into 26 different waste streams including oxidizers, peroxides, cyanides, lead, chlorinated organics, acids, organic solids, inorganic solids and PCBs.

The Elm Street cover was repaired, and re-graded with 64 tons of crushed stone and 132 tons of 3/4 inch washed stone. A geotextile liner was placed at the Mill Street site where the shed was formerly located, and 3 to 6 inches of sand fill and 6 to 8 inches of topsoil were placed over the liner. The Mill Street site was then hydro-seeded.

In the summer of 1995, General Electric (GE), a potentially responsible party at the Site, conducted a fourth removal. Pursuant to a Unilateral Administrative Order issued on July 13, 1995, under Section 106 of CERCLA, GE removed PCB contaminated soil from surface soil, under lawns, and on the dirt driveways of three residential properties across from the Mill Street site to protect residents from the risks of direct exposure to PCBs. Many of the residents chose to be included in a voluntary relocation program during this action. A 10 foot wide paved apron was added to the Mill Street site at the end of the action to prevent further degradation and wear of the edge of the cover and Mill Street itself was re-paved to direct surface water runoff toward the Fletcher Paint property and away from the residences.

In August of 1996, GE performed a voluntary soil cleanup of the small piece of land east of, and adjacent to the Fletcher Paint building. This small piece of land was found to have low levels of PCB contamination. General Electric voluntarily removed the contaminated soils as well as additional soil to enable a Korean War Memorial to be built on that location.

B. Contamination at the Site

The most prevalent hazardous substance found at the site was PCBs. In general, where high levels of PCBs are found in the soils at the site, trichloroethylene (TCE) and 1,2,4-trichlorobenzene (TCB) were also found. The RI investigations revealed that in addition to overall surficial PCB contamination in the soils as a result of the dust suppression and related activities at the Site, the highest and deepest concentrations of PCB contamination directly correspond to the former drum storage areas of the site. To a lesser extent, other hazardous materials found at the site during the RI included volatile organic compounds (VOCs) such as xylene, ethylbenzene, toluene and TCE; metals such as lead, chromium, antimony and barium; and semivolatile organic compounds (SVOCs) such as TCB, phthalates and polycyclic aromatic hydrocarbons (PAHs).

Groundwater contamination at the Site includes TCE, TCB, PCBs, xylene, ethyl benzene and toluene.

C. Summary of the Selected Remedy

The September 30, 1998, ROD for this Site sets forth the selected remedy for Operable Unit One at the Fletcher's Paint Site. The remedy involves the excavation and on-site treatment of principal threat wastes which consist primarily of PCB contaminated soils, the use of the treated soils as backfill at the Site, and placement of a soil and asphalt cover over the residual low-level threat wastes. The selected remedy also includes monitored natural attenuation of the contaminated groundwater in the overburden and bedrock aquifers and institutional controls to prevent future ingestion of contaminated groundwater, as well as restrictions on the use and access to the subsurface soils at the Elm Street Site.

Specifically, Operable Unit One includes the areas referred to as the Elm Street Site, the Mill Street Site, the drainage ditch and the plume of groundwater contamination that exists from the Mill Street Site to the Souhegan River. The remedial measures to be implemented as part of the ROD, will prevent direct contact with contaminated soils, will prevent the future leaching of PCBs from the low-level residual waste, into groundwater in excess of drinking water standards and will allow for restoration of the Site to beneficial uses.

The selected remedy includes these major components:

Soil

Phase 1 - Mill Street Site Cleanup:

1. Excavation of surface soils at the Mill Street Site to a depth of 1 foot, wherever PCB concentrations are greater than 1 mg/kg PCB.

2. Excavation of subsurface soils at the Mill Street Site wherever PCB concentrations remain that exceed 1 mg/kg PCB; or excavation of soils to a PCB concentration which will not result in future groundwater concentrations in excess of the 0.5 ug/l MCL groundwater concentration for PCBs. The determination of a subsurface soil cleanup level other than 1 mg/kg PCB, will be in the sole discretion of the EPA.

3. Treatment of excavated soils by ex-situ thermal desorption. The thermal desorption unit would be located on the Elm Street property. Liquid PCB condensate produced from the thermal desorption process will be disposed of off-site at an appropriate facility.

4. Demolition and disposal of the Fletcher's Elm Street building prior to, or following thermal desorption activities. [1]

5. Backfilling of the treated soils back onto the Mill Street Site and restoration of the property consistent with the anticipated future use of the Site.

6. Regrading and repair of the storm drainage ditch system, as necessary, to promote surface water flow away from the Site.

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[1] At the time of issuance of this ESD, the former Fletcher's Paint building has been demolished and the building debris removed from the site for disposal. A temporary cover consisting of a permeable liner and sand has been installed and the Site secured with fencing, until the remainder of the remedy can be undertaken.

Phase 2 - Elm Street Site Cleanup:

1. Excavation of surface soils at the Elm Street Site to a depth of 1 foot, wherever PCB concentrations are greater than 1 mg/kg PCB.

2. Excavation of subsurface soils, within the utility corridor(s), at the Elm Street Site at depths between 1 and 10 feet, wherever PCB concentrations are greater than 25 mg/kg PCB.

3. Excavation of remaining subsurface soils, with the exception of the "hot spot" materials described below, from 1 foot to the seasonally low water table, wherever PCB concentrations remain that exceed 100 mg/kg; or to a PCB concentration at which infiltration through the remaining PCB soil concentrations will not result in future groundwater concentrations in excess of the 0.5 ug/l MCL groundwater concentration for PCBs.

4. Excavation and off-site disposal in an appropriate landfill of the EB-03 "hot spot", a semi-solid stain (polyamide and polyurethane) material.

5. Removal and disposal of the 5 underground storage tanks located on the Fletcher's Elm Street property.

6. Treatment of the excavated soils by ex-situ thermal desorption. The thermal desorption unit would be preferably located on the Fletcher's Elm Street property. Liquid PCB condensate produced from the thermal desorption process will be disposed of off-site at an appropriate facility.

7. Backfilling of the treated soils on-site and final grading of and placement of a 10 inch soil cover over the treated soils, or placement of treated soils within the top foot, which can demonstrate PCB concentrations less than or equal to 1 mg/kg PCB. Asphalt would be placed on areas designated for parking, consistent with the final grading plans and the future anticipated use of the Site to promote drainage and further minimize infiltration through the residual contamination at the Site.

III. DESCRIPTION OF SIGNIFICANT DIFFERENCES

Soil cleanup levels that are protective of human health were established in the September 30, 1998 ROD for compounds of concern in the surface and subsurface soils exhibiting an unacceptable cancer risk and/or hazard index. Soil cleanup levels for known and suspect carcinogenic chemicals of concern (Classes A, B, and C compounds) were set at a 10-6 excess cancer risk level considering exposures through dermal contact and incidental ingestion. Cleanup levels for chemicals of concern in soils having non-carcinogenic effects (Classes D and E compounds) were derived for the same exposure pathway(s) and correspond to an acceptable exposure level to which the human population (including sensitive subgroups) may be exposed without adverse effect during a lifetime or part of a lifetime, incorporating an adequate margin of safety (hazard quotient = 1).

Cleanup levels, based on dermal contact and incidental ingestion, were developed for two depths of soil at the Site:

Surface Soils:	0 to 1 foot across the Site; and
Subsurface Soils:	1 to 10 feet at the Elm Street Site within a utility corridor(s).

This ESD sets forth a change in the cleanup level language established in the ROD to include the following language:

> "If a cleanup value described in the ROD, is not capable of being detected with good precision and accuracy or is below background values, then either the practical quantitation limit or a background value will be used, as appropriate, for the soil cleanup level."

This change in language is necessary to reflect the potential for background concentrations of arsenic at the Site to be higher than the ROD established cleanup level of 0.9 mg/kg and the practical quantitation limit for benzo(a)pyrene to be higher than the ROD established cleanup level of 0.2 mg/kg.

The proposed modification embodied in this ESD will protect human health and the environment, will comply with all applicable or relevant and appropriate Federal and State requirements, and will provide for a long-term and permanent remedy for the Site to a similar degree as the remedy outlined in the ROD.

IV. SUPPORT AGENCY COMMENTS

The State of New Hampshire has participated with the EPA in reviewing the modifications to the remedy which are described herein and concurs with this ESD.

V. STATUTORY DETERMINATION

Considering the above outlined adjustment to the selected remedy set forth in the ROD, the EPA believes that the remedy remains protective of human health and the environment, complies with all Federal and State requirements that are applicable or relevant and appropriate to this remedial action, and is cost-effective.

VI. PUBLIC INFORMATION

This ESD and the Administrative Record are available for public review at the locations and times listed in Section I. above.